REMARKS

Claims 1-11 have been amended. Claims 12-19 have been added. Claims 1-19 remain for further consideration. No new matter has been added.

The objections and rejections shall be taken up in the order presented in the Official Action.

1-2. The drawings currently stand objected to.

The drawings have been amended. Replacement drawing sheets are enclosed herewith.

3-8. Claims 1, 6, 7, 10 and 11 currently stand rejected for allegedly being obvious in view of the combined subject matter disclosed in U.S. Patent 5,526,053 to Dorricott (hereinafter "Dorricott") and U.S. Patent 5,446,497 to Keating (hereinafter "Keating").

Claim 1

Claim 1 recites a method for motion-vector-aided interpolation of a pixel of an intermediate image lying between two input images. The method includes the steps of:

> "selecting a first pixel from the first input image and assigning a first video information value to the first pixel;
> selecting a second pixel from the second input image and assigning a second video information value to the second pixel using the first motion vector;
> selecting a third pixel from the first input image and assigning a third video information value to the third pixel using a second motion vector;
> selecting a fourth pixel from the second input image and assigning a fourth video information value to the fourth pixel using the second motion vector;
> determining a first interval specified by the first video information value and the second video information value or a second interval specified by the third video information value and the fourth video information value; and

mixing the video information values by multiplying the first video information value by a first weighting factor, the second video information value by a second weighting factor, the third video information value by a third weighting factor, and the fourth video information value by a fourth weighting factor and adding the weighted video information values to obtain a video information value of the pixel of the intermediate image, <u>the weighting factors being chosen such that the video information value of the pixel of the intermediate image lies within the determined first or second intervals.</u>" (emphasis added; cl. 1).

Assuming for the moment without admitting that Dorricott and Keating are even combinable, it is respectfully submitted that the resultant combination is incapable of rendering obvious the claimed invention. The Official Action contends Dorricott discloses *"...determination of an interval specified by the first video information value-and the second information video value or an interval specified by the third video information value and the fourth video information value (col. 1 line 65 – col. 2 line 2). An interval is automatically determined if time at the beginning and end of vector".* (Official Action, pg. 4). However, a fair and proper reading of Dorricott reveals that the combined teachings of Dorricott and Keating fail to disclose or suggest the claimed feature of *"determining a first interval specified by the first video information value and the second video information value or a second interval specified by the third video information value and the fourth video information value".* (cl, 1). The section of Dorricott, col. 1, line 65 – col. 2, line 2 cited in the Official Action in support of this rejection has nothing to do with the selection of an interval as set forth in claim 1. In the cited section Dorricott merely states *"[a] vector reduction process is employed to assign a group of motion vectors to each of a plurality of blocks of an output field (corresponding in positions to respective search blocks of the input field f0). This group of motion vectors is selection from, in the following order of preference,..."* (col. 1, line 65 – col. 2, line 2). This cited section of Dorricott, either alone or in combination

with Keating, fails to disclose or suggest the claimed step of determining *a first interval* specified by the first and second video information values or *a second interval* specified by the third and fourth video information values. There is simply no disclosure in Dorricott of an interval that is used to determine the weighting factors as set forth in claim 1. Selecting an interval as recited in claim 1 can not be construed as reading on how to assign a group of motion vectors – an interval as claimed is not a motion vector.

As known the claimed invention as a whole must be considered when assessing patentability. It is respectfully submitted that the combination of Dorricott and Keating is incapable of rendering obvious the claimed invention since the combination fails to disclose or suggest the step of *"determining a first interval specified by the first video information value and the second video information value or a second interval specified by the third video information value and the fourth video information value"*. (cl, 1).

Claim 12

New claim 12 recites an apparatus for motion-vector-aided interpolation of a pixel of an intermediate image lying between two input images, where the apparatus includes *"means for determining a first interval specified by the first video information value and the second video information value or a second interval specified by the third video information value and the fourth video information value;"*. (cl. 12, emphasis added). As set forth above with respect to claim 1, a fair and proper reading of Dorricott and Keating fails to disclose or suggest determining a first interval or a second interval as recited in claim 12. As discussed above with respect to claim 1, the section in Dorricott relied upon by the Official Action for allegedly disclosing such a claimed feature clearly fails to disclose such a feature. That is, the cited section

of Dorricott merely discusses how to select motion vectors and nothing to do with the claimed feature of providing a *"means for determining a first interval specified by the first video information value and the second video information value or a second interval specified by the third video information value and the fourth video information value"*. (cl. 12, emphasis added). Selecting an interval as recited in claim 12 can not be construed as reading on how to assign a group of motion vectors – an interval as claimed is not a motion vector.

9-10. Claims 1-11 are provisionally rejected for allegedly claiming the same invention as that of claims 1-11 of application serial number 10/775,532.

It is submitted that the Official Action intended to specify in the provisional double patenting rejection application 10/636,298, which is the parent of the present application, instead of application 10/775,532, which is the present application. Nevertheless, in the parent application serial number 10/636,298, an Official Action was mailed on December 28, 2006. The applicants are proceeding with the present application rather than the parent, and the parent application was allowed to go abandoned for failure to submit a response to the Official Action dated December 28, 2006. As a result, it is respectfully submitted that the provisional double patenting rejection is now moot and should be removed.

For all the foregoing reasons, reconsideration and allowance of claims 1-19 is respectfully requested.

If a telephone interview could assist in the prosecution of this application, please call the undersigned attorney.

Respectfully submitted,

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